

FIG. 1

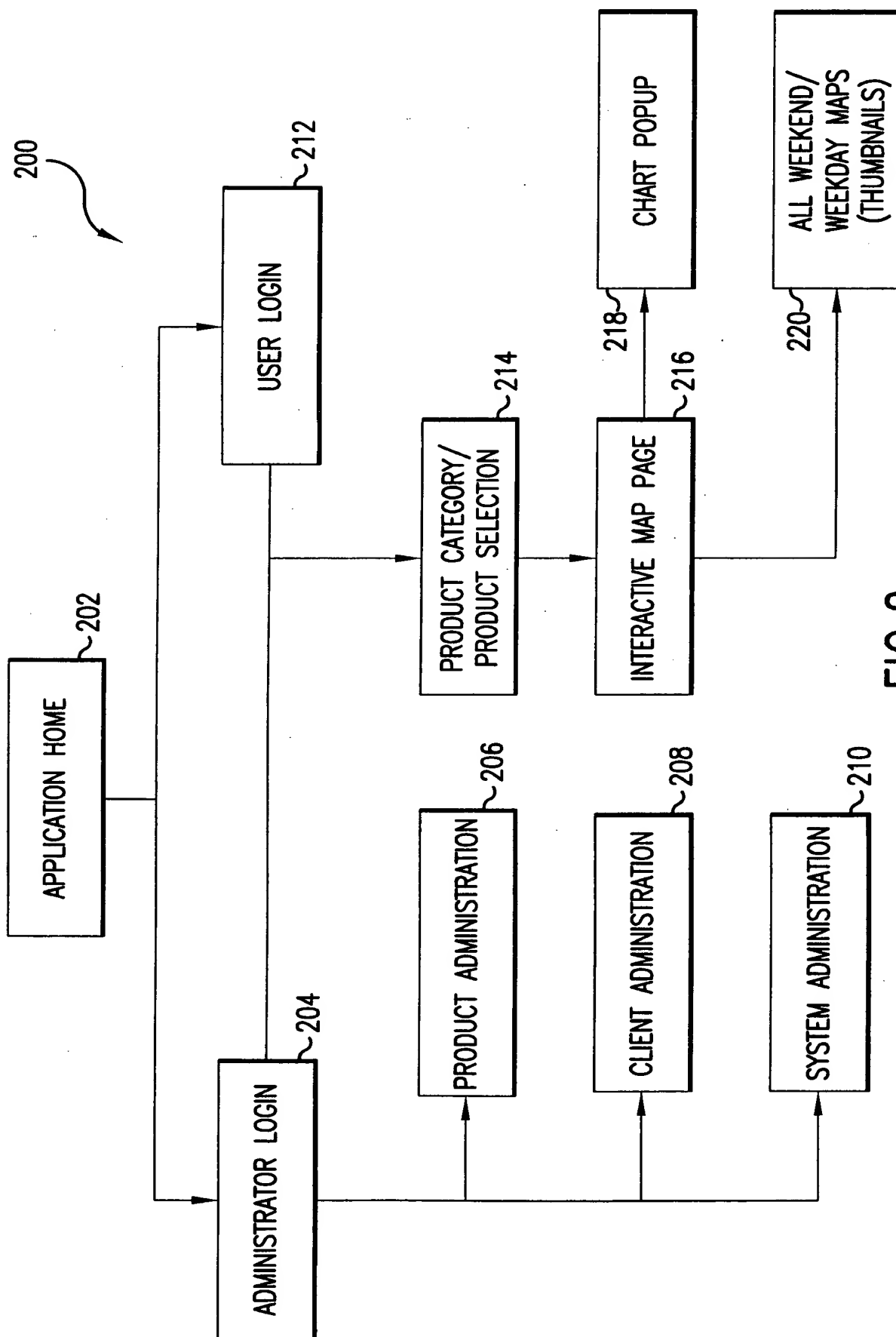


FIG. 2

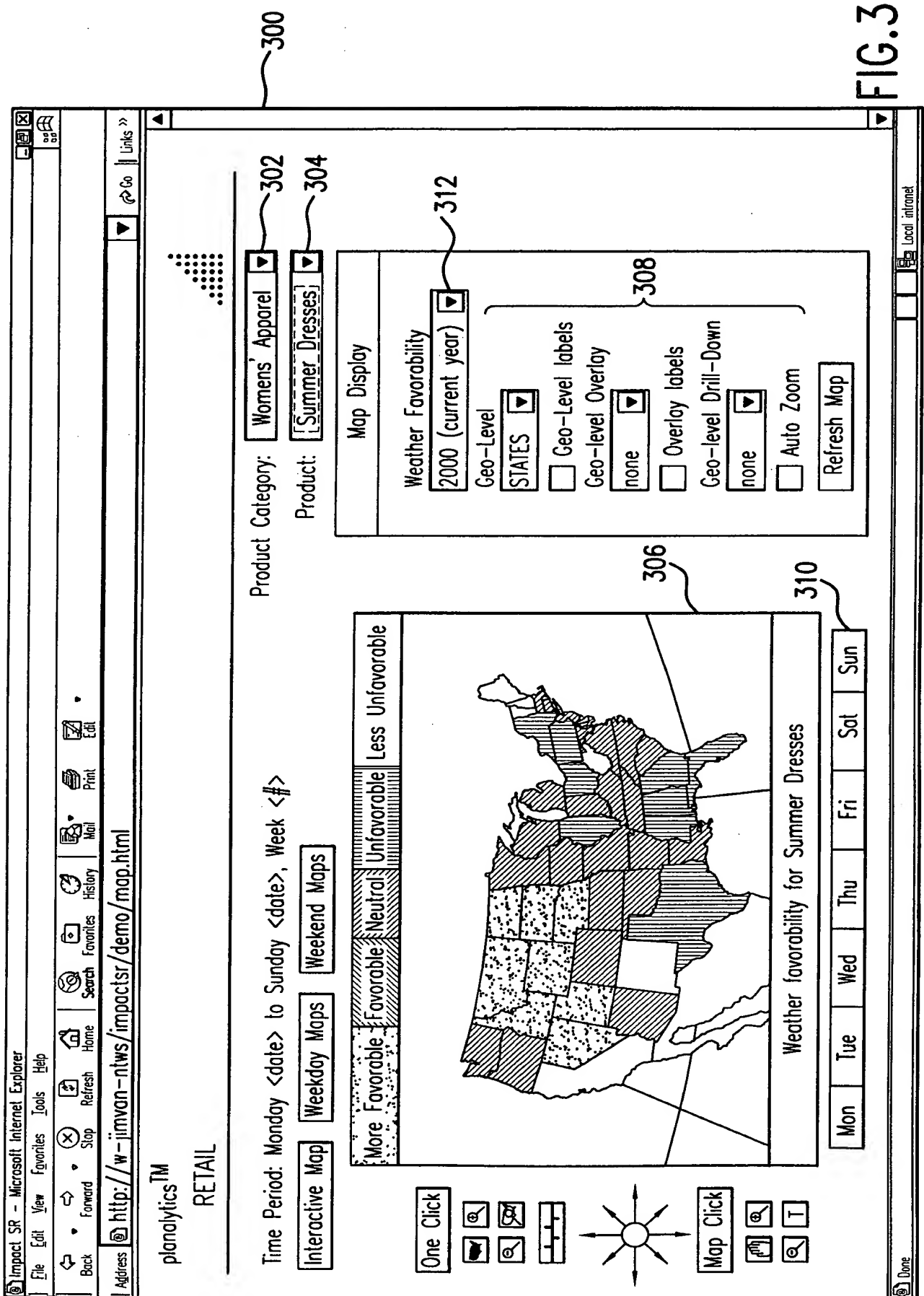


FIG. 3

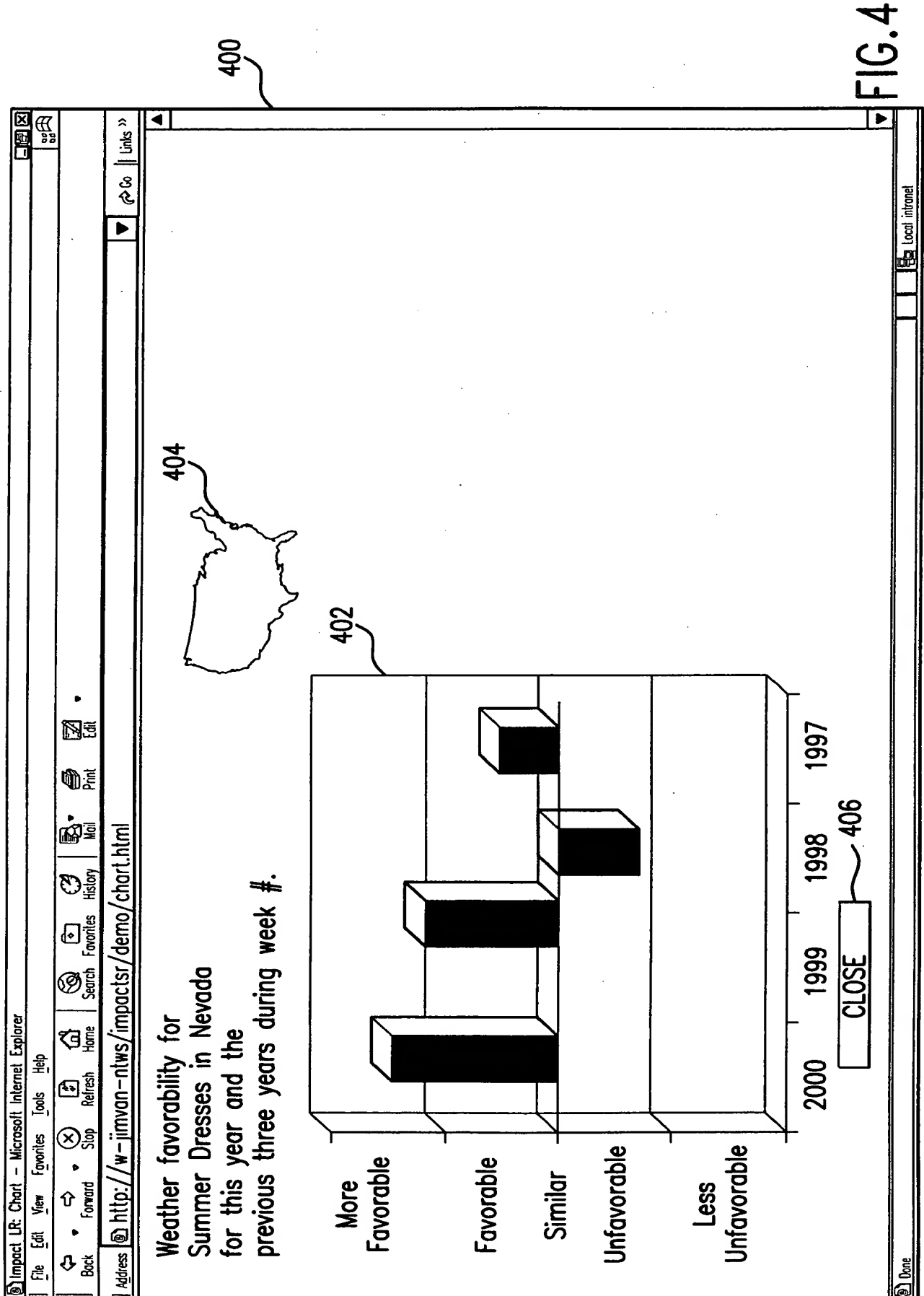


FIG. 4

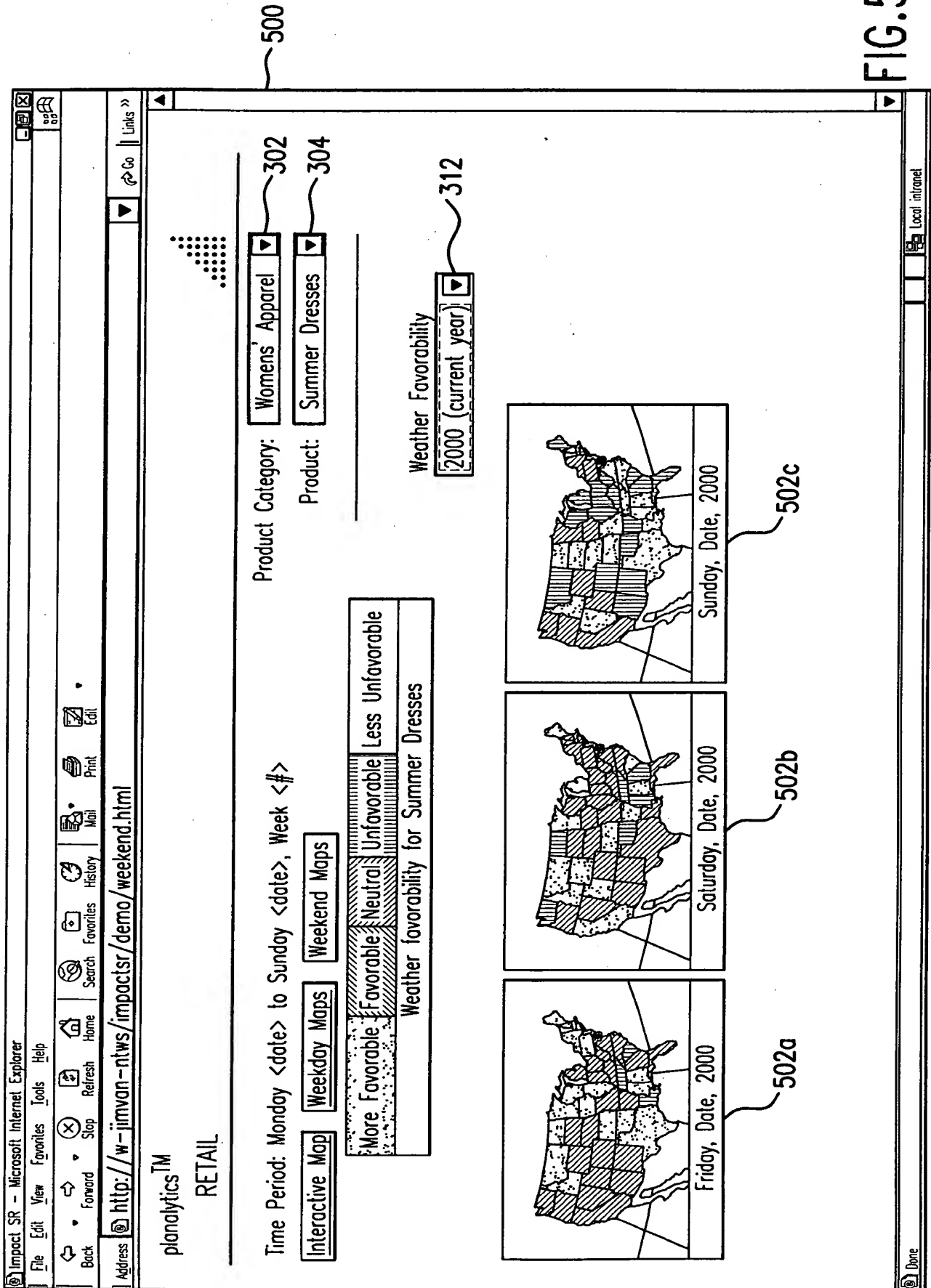


FIG. 5

LEGEND	LETTER	FAVORABILITY	VALUE
	MF	MOST FAVORABLE	2
	F	FAVORABLE	1
	T	TYPICAL	0
	U	UNFAVORABLE	-1
	MU	MOST UNFAVORABLE	-2
	NA	OUT OF SEASON	

PRODUCT	A	DRY	SHOWERS	RAIN	SNOW
1 A/C	V. WARM	2	2	1	-2
2 FANS	WARM	2	1	1	-2
22 AUTO A/C UNITS	SEASONAL	0	0	-1	-2
26 BOTTLED WATER	COLD	-1	-1	-2	-2
	V. COLD	-2	-2	-2	-2

FIG.6A

3 HEATERS
 FILTERS

B	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-1	0
WARM	-1	-1	-1	0
SEASONAL	0	0	1	1
COLD	1	2	2	2
V. COLD	2	2	2	2

4 HUMIDIFIERS

C	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	0
WARM	-1	-1	-1	0
SEASONAL	0	0	0	0
COLD	2	2	1	1
V. COLD	2	2	1	1

FIG.6B

5 BEDDING PLATNS
 6 TREES & SHRUBS
 WARM IS GOOD

D	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	-1	-1	-2	-2
V. COLD	-1	-1	-2	-2

5 BEDDING PLATNS
 6 TREES & SHRUBS
 SEASONAL IS GOOD

E	DRY	SHOWERS	RAIN	SNOW
V. WARM	-1	-1	-2	-2
WARM	0	0	-2	-2
SEASONAL	2	2	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	-1	-2	-2

FIG.6C

5 BEDDING PLATNS
 6 TREES & SHRUBS
 COLD IS GOOD

F	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	-2
WARM	-1	-1	-2	-2
SEASONAL	1	1	-1	-2
COLD	2	2	-1	-2
V. COLD	1	1	-1	-2

7 GED SOIL/PEAT/MULCH
 WARM/DRY GOOD

G	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	-1	-1	-2	-2
V. COLD	-1	-1	-2	-2

FIG.6D

7 GED SOIL/PEAT/MULCH
 SEASONAL/DRY GOOD

H	DRY	SHOWERS	RAIN	SNOW
V. WARM	-1	-1	-2	-2
WARM	0	0	-2	-2
SEASONAL	2	1	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	-1	-2	-2

7 GED SOIL/PEAT/MULCH
 COLD/DRY GOOD

I	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	-2
WARM	0	-1	-2	-2
SEASONAL	1	1	-1	-2
COLD	2	2	-1	-2
V. COLD	1	1	-1	-2

FIG.6E

8 FERTILIZER
 WARM/DRY GOOD

J	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	0	-1	-2	-2
V. COLD	-1	-1	-2	-2

8 FERTILIZERS
 SEAS.T/SEAS.P GOOD

K	DRY	SHOWERS	RAIN	SNOW
V. WARM	-1	-1	-1	-2
WARM	0	1	-1	-2
SEASONAL	2	2	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	0	-1	-2

FIG.6F

8 FERTILIZERS
 COLD/SEAS.P GOOD

L	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-1	-1	-2
WARM	-1	0	-1	-2
SEASONAL	0	1	-1	-2
COLD	1	2	-1	-2
V. COLD	1	1	-1	-2

9 WEED KILLER
 10 INSECTICIDES
 WARM GOOD

M	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	0	0	-1	-2
COLD	0	-1	-2	-2
V. COLD	-1	-2	-2	-2

FIG.6G

9 WEED KILLER
 10 INSECTICIDES
 SEASONAL GOOD

N	DRY	SHOWERS	RAIN	SNOW
V. WARM	0	0	-2	-2
WARM	0	1	-2	-2
SEASONAL	2	2	-1	-2
COLD	1	1	-2	-2
V. COLD	-1	-1	-2	-2

11 SPRINKLERS/HOSES
 WARM/DRY GOOD

0	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	1	-1	-2	-2
V. COLD	0	-1	-2	-2

FIG.6H

12 MOWERS/TRIMMERS
 WARM/SEAS P. GOOD

P	DRY	SHOWERS	RAIN	SNOW
V. WARM	1	2	-1	-2
WARM	1	2	-1	-2
SEASONAL	1	1	-1	-2
COLD	0	-1	-2	-2
V. COLD	-1	-1	-2	-2

12 MOWERS/TRIMMERS
 SEAS T./SEAS P. GOOD

Q	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	0	-1	-2
WARM	-1	1	-1	-2
SEASONAL	0	2	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	0	-1	-2

FIG.6I

R	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-1	-1	-2
WARM	-1	0	-1	-2
SEASONAL	0	1	-1	-2
COLD	1	2	-1	-2
V. COLD	1	2	-1	-2

12 MOWERS/TRIMMERS
 COLD T/SEAS P GOOD

S	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	-1	-1	-2	-2
V. COLD	-1	-1	-2	-2

13 GARDEN TOOLS
 15 GRILLS/CHARCOAL
 16 O/FURN. LAWN CHAIRS
 20 WAX/WASH CHEMICALS
 31 HOUSE/DECK PAINT
 WARM GOOD

FIG.6J

	T	DRY	SHOWERS	RAIN	SNOW
13 GARDEN TOOLS	V. WARM	-1	-1	-2	-2
15 GRILLS/CHARCOAL	WARM	0	0	-2	-2
16 O/FURN. LAWN CHAIRS	SEASONAL	2	2	-1	-2
20 WAX/WASH CHEMICALS	COLD	1	1	-1	-2
31 HOUSE/DECK PAINT	V. COLD	-1	-1	-2	-2
SEASONAL IS GOOD					

	U	DRY	SHOWERS	RAIN	SNOW
13 GARDEN TOOLS	V. WARM	-2	-2	-2	-2
15 GRILLS/CHARCOAL	WARM	-1	-1	-2	-2
16 O/FURN. LAWN CHAIRS	SEASONAL	1	1	-1	-2
20 WAX/WASH CHEMICALS	COLD	2	2	-1	-2
31 HOUSE/DECK PAINT	V. COLD	1	1	-1	-2
COLD IS GOOD					

FIG.6K

14 POOL SUPPLIES
 24 WATER TOYS
 25 KID POOLS/POOL TOYS
 28 SUNTAN LOTION
 29 BEACH SUPPLIES

V	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	0	-2
WARM	2	1	-1	-2
SEASONAL	0	0	-1	-2
COLD	-1	-1	-2	-2
V. COLD	-1	-1	-2	-2

17 NOW TOOLS/BLOWERS
 SNOW/ICE/FROST GOOD

W	DRY	SNOW SHWR.	ICE	SNOW
V. WARM	-2	-2	0	1
WARM	-2	-1	1	1
SEASONAL	-1	1	1	2
COLD	0	2	2	2
V. COLD	1	2	2	2

NOTE: WINTER
 PRECIP
 LEGEND

FIG.6L

18 FIRELOGS
COLD/WET GOOD

NOTE: WINTER
PRECIP
LEGEND

X	DRY	R/S SHWRS.	RAIN/ICE	SNOW
V. WARM	-2	-2	-1	0
WARM	-1	-1	0	1
SEASONAL	0	0	1	1
COLD	1	1	2	2
V. COLD	2	2	2	2

19 BATTERIES
21 ANTIFREEZE
COLD IS GOOD

Y	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	0
WARM	-1	-1	-1	0
SEASONAL	0	0	0	1
COLD	1	2	2	2
V. COLD	2	2	2	2

FIG.6M

Z	DRY	SHOWERS	RAIN	SNOW
V. WARM	1	2	2	NA
WARM	1	1	1	NA
SEASONAL	0	0	0	NA
COLD	-1	-1	-1	NA
V. COLD	-2	-2	-2	NA

19 BATTERIES

21 ANTIFREEZE

WARM IS GOOD

AA	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	1	2	2
WARM	-2	1	2	2
SEASONAL	-2	1	2	2
COLD	-2	1	2	2
V. COLD	-2	1	2	2

23 WIPERS/WASHER FLUID

30 UMBRELLAS

FIG.6N

BB	DRY	SHOWERS	RAIN	SNOW
V. WARM	0	-2	-2	0
WARM	0	-1	-1	0
SEASONAL	1	0	0	1
COLD	2	2	0	1
V. COLD	2	2	2	2

HAND LOTION

COLD/DRY GOOD

CC	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	0	NA
WARM	1	0	-1	NA
SEASONAL	1	-1	-1	NA
COLD	1	0	-1	NA
V. COLD	2	1	0	NA

HAND LOTION

WARM/DRY GOOD

FIG.60

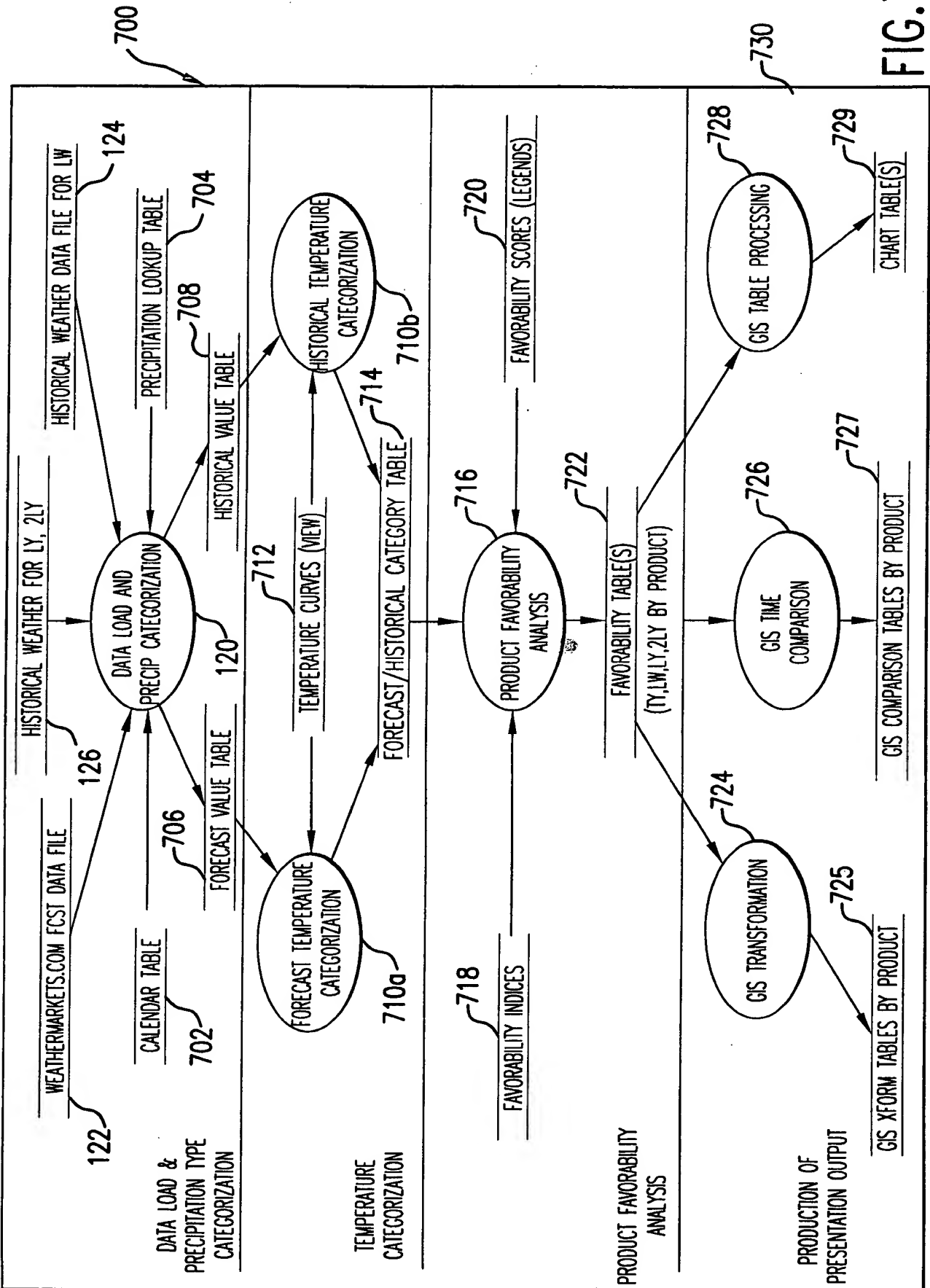


FIG. 7

YEAR	MA	DATA TYPE	P1	P2	P3	P4	P5	P6
1994	MSA 100	TEMP.SEA	46	47	50	51	54	55
1995	MSA 100	TEMP.SEA	46	47	49	51	53	55
1994	MSA 100	SNOW.SEA	0.7	0.2	0.2	0.1	0	0.1
1995	MSA 100	SNOW.SEA	0.8	0.2	0.2	0.1	0	0
1994	MSA 100	PREC.SEA	1.01	1.03	1.08	1.1	1.12	1.1
1995	MSA 100	PREC.SEA	1.01	1.03	1.07	1.1	1.12	1.1
1994	MSA 100	SNOW	0	0	0	0	1.2	0
1995	MSA 100	SNOW	0	0	0	0	0	0
1994	MSA 100	PREC	1.5	0.4	0.9	1.3	1.7	0.3
1995	MSA 100	PREC	1.1	0.01	2.68	1.78	0.48	0.01
1994	MSA 100	TEMP	49	43	45	47	50	42
1995	MSA 100	TEMP	53	51	56	50	58	54
1994	MSA 100	TEMP.CAT	1	-1	-1	-1	-1	-1
1995	MSA 100	TEMP.CAT	1	1	1	0	1	-1
1994	MSA 100	PREC.CAT	1	-1	-1	1	1	-1
1995	MSA 100	PREC.CAT	1	-1	1	1	-1	-1

FIG.8

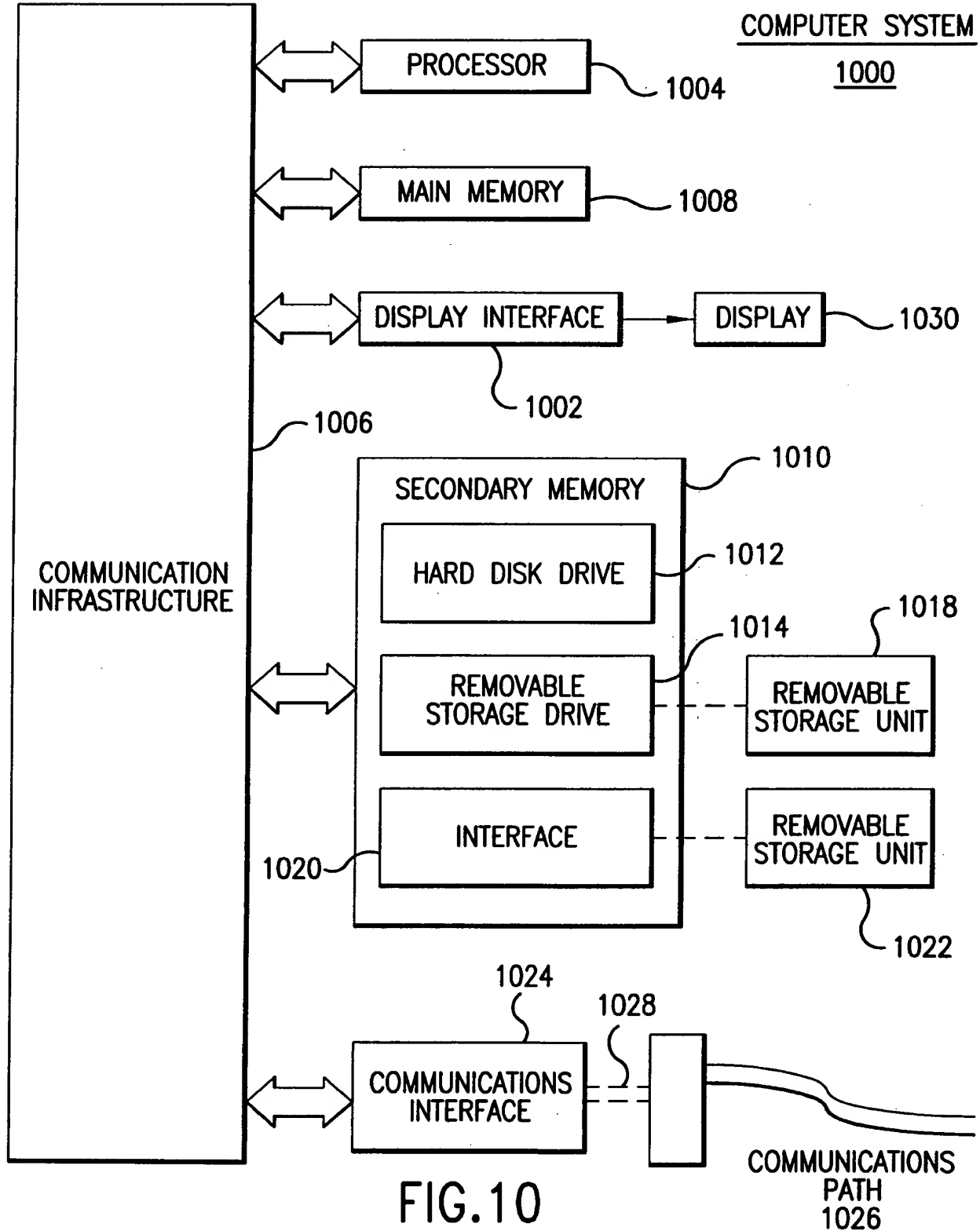
WEATHER FORECAST DATA 900

YEAR	MA	DATA TYPE	P1	P2	P3	P4	P5	P6
N+1	MSA 100	SNOW	0.9	0.4	0.3	0.2	0	0
N+1	MSA 100	PREC	1.1	1.05	1.05	1.00	1.15	1.2
N+1	MSA 100	TEMP	48	49	50	53	55	57
N+1	MSA 100	TEMP.CAT	1	1	1	1	1	-1
N+1	MSA 100	PREC.CAT	1	1	-1	-1	1	1
N+1	MSA 100	SNOW.CAT	1	0	0	1	0	0
N+1	MSA 100	SNOW.SEA	0.8	0.4	0.3	0.1	0	0
N+1	MSA 100	PREC.SEA	1.00	1.03	1.06	1.05	1.10	1.1
N+1	MSA 100	TEMP.SEA	47	47	49	52	54	55

902

904

FIG.9



PRECIPITATION LOOKUP TABLE 704

PRECIP_TYPE	PRECIP_CODE	PRECEDENCE	PRECIP_DEFINITION
	SN	6	SNOW
	ICE	5	ICE
	SNSH	4	SNOW SHOWERS
	RA	3	RAIN
	RASH	2	SHOWERS
	DRY	1	DRY

EVENT_PRECIP_CODE	EVENT_CODE	EVENT_DEFINITION	PRECIP_CODE
	MISS	MISSING EVENT STRING	DRY
	UP	UNKNOWN PRECIPITATION	DRY
	UNINT	UNINTERPRETABLE CODE	DRY
	TS	THUNDERSTORM	DRY
	RW	RAINSHOWERS (OBSOLETE CODE)	RASH
	RN	RAIN (OBSOLETE CODE)	RA
	IP	ICE PELLETS (OBSOLETE CODE)	ICE
	PE	ICE PELLETS	ICE
	DZ	DRIZZLE	RA
	RA	RAIN	RA
	SH	SHOWERS	RASH
	SN	SNOW	SN
	SG	SNOW GRAINS (SMALL GRANULAR SNOW)	SN
	IC	ICE CRYSTALS	DRY
	PL	ICE PELLETS	ICE
	GR	HAIL	RASH
	GS	SMALL HAIL OR SNOW PELLETS	RASH
	BR	MIST (LIGHT FOG)	RASH
	FG	FOG	DRY

FIG. 11B

HISTORICAL VALUE TABLE 706 AND FORECAST VALUE TABLE 708

NAME	NULL?	TYPE
STATION	NOT NULL	CHAR (4)
DAY	NOT NULL	DATE
MAX_TEMP		NUMBER (3)
MIN_TEMP		NUMBER (3)
MEAN_TEMP		NUMBER (3)
PRECIP		NUMBER (6,2)
PRECIP_CAT		VARCHAR2 (9)
TYPE		VARCHAR2 (4)

FIG.11C

HISTORICAL CATEGORY TABLE AND FORECAST CATEGORY TABLE 714

NAME	NULL?	TYPE
STATION	NOT NULL	CHAR (4)
DAY	NOT NULL	DATE
MAX_TEMP		NUMBER (3)
MIN_TEMP		NUMBER (3)
MEAN_TEMP		NUMBER (3)
TEMP_CAT		NUMBER (3)
PRECIP		NUMBER (6,2)
PRECIP_CAT		VARCHAR2 (9)
TYPE		VARCHAR2 (4)

FIG.11D

PRODUCT FAVORABILITY TABLE 722

NAME	NULL?	TYPE
STATION	NOT NULL	CHAR (4)
DAY	NOT NULL	DATE
PRODUCT_ID	NOT NULL	NUMBER (10)
WX_FAV		NUMBER (1,2)

FIG. 11E

GIS TRANSFORM 725 AND GIS COMPARISON TABLE 727

NAME	NULL?	TYPE
STATION		
D1		NUMBER (1,2)
D2		NUMBER (1,2)
D3		NUMBER (1,2)
D4		NUMBER (1,2)
D5		NUMBER (1,2)
D6		NUMBER (1,2)
D7		NUMBER (1,2)

FIG. 11F

PRE-GIS TRANSFORMATION

STATION	DAY	PRODUCT_ID	WX_FAV
KPHL	9/4/00	1	1
KPHL	9/5/00	1	2
KPHL	9/6/00	1	-1
KBWI	9/4/00	1	2
KBWI	9/5/00	1	0
KBWI	9/6/00	1	0
KBOS	9/4/00	1	1
KBOS	9/5/00	1	2
KBOS	9/6/00	1	-2

FIG. 11G

POST-GIS TRANSFORMATION

STATION	D1	D2	D3
KPHL	1	2	-1
KBWI	2	0	0
KBOS	1	2	-2

FIG. 11H